

Exhibit 4

1
2 UNITED STATES DISTRICT COURT
3 FOR THE NORTHERN DISTRICT OF CALIFORNIA
4 SAN JOSE DIVISION
5

6 In Re Google, Inc., Privacy Policy Litigation.

Case No. 5:12-cv-01382

7 REPLY DECLARATION OF
8 FERNANDO TORRES ON THE
9 MARKET VALUE OF CLASS
10 MEMBERS' PERSONALLY
11 IDENTIFIABLE INFORMATION AT
12 ISSUE

13 Date: June 12, 2015
14
15

16
17 I, FERNANDO TORRES, declare and state as follows:

18
19 1. I have been retained as an expert by attorneys for Plaintiffs to consult concerning the
20 damages issues presented in the above-captioned case. Specifically, I have been tasked with
21 analyzing the economic damages to Plaintiffs and others similarly situated due to Defendant
22 Google, Inc.'s ("GOOGLE") breach of the privacy policies and other contracts that governed
23 the privacy rights of Android Users during the Class Period (February 1, 2009 to May 31,
24 2014).

25 2. In the course of this engagement, I conducted research relying on publicly available
26 information. After reviewing and analyzing the material available to me and after conducting
27 further research surrounding the relevant issues, I produced a Report dated March 12, 2015.
28 Further to that Report, now that GOOGLE has submitted its opposition to Plaintiffs' motion for
class certification, I have been asked to address one specific conclusion set forth in the Report

1 regarding the market value determination of the personally identifiable information at issue in
 2 this case. Again, the facts and data considered in forming my opinions are identified where
 3 referenced in the text and footnotes that follow.

4 3. In my Report, I state that the market value of the personally identifiable information at
 5 issue is measurable via the proxy of the prices paid for consumer email databases for mass
 6 marketing purposes.¹ There is a well-developed market for collections of such sets of
 7 information. Furthermore, the information at issue has the additional characteristics of being
 8 both current and associated with Android smartphone owners in the market for premium
 9 mobile apps. As a consequence, it is rational to expect the market value of this type of highly-
 10 qualified lead information to be worth more than general (un-qualified) lead information.

11 4. Methodologically, the Market Approach to valuation relies on identifying comparable
 12 transactions to establish benchmark values to appraise an asset. Consistent with this approach,
 13 in my Report, I researched pricing from information brokers for marketing lists focusing on the
 14 comparability of the information being sold, and took account of the additional qualitative
 15 attributes of the information at issue. Based on my research into the highly competitive market
 16 for consumers' personal information,² I concluded that the personal information at issue has a
 17 value of \$0.18 per set, explaining that general, unqualified personal data has a minimum value
 18 of \$0.015 per set and that the market value of the more highly-qualified data provided by
 19 GOOGLE to app developers is higher than this minimum figure.³

20 5. In the Report I referenced the pricing quoted for mailing lists of "New Movers and
 21 Homeowners" from a specific national vendor⁴ as the most comparable proxy since, as of the
 22 date of the Report, I found that its price per name was in the middle of the range of all prices
 23 identified for qualified mailing lists; however, the Report listed only the information I
 24

25 ¹ Report, at §16(a).

26 ² The competitive nature of the market also implies that prices tend to converge around industry averages, as
 27 potential buyers can compare prices and drive outliers out of business. Thus, a comprehensive census of offerings
 28 is not necessary, a simple sampling of a relatively few competitors is sufficient to ascertain industry averages.

³ Report at §17.

⁴ Vistaprint, using information from AccuData. (<http://www.vistaprint.com/maillinglists.aspx> retrieved January 26,
 2015). I have since learned that service is no longer being offered.

1 considered at the time to be most relevant to my conclusion, rather than all such information I
2 found.

3 6. To further clarify the nature of the supporting data regarding that conclusion, I am here
4 including further pricing data for specifically-targeted marketing lists available from a variety
5 of sources which provide information to be used for postal mailing, electronic mailing, and
6 telephone/text messaging marketing campaigns. Exhibit 1, for example, contains the first 30
7 listings available from several vendors via marketing firm Nextmark when searching for email
8 lists of "smartphone owners". Focusing on the listings "Mobile Smartphone Users" and
9 "Smartphone and Tablet Users," I was able to determine that the cost of a minimal database of
10 name and email addresses from these sources was \$190 and \$175 per thousand respectively, to
11 which an additional fee of \$140 or \$125 per thousand must be added as shown in Exhibits 2
12 and 3. Thus, the average market price of this information is \$0.315 per set (name and email
13 address).⁵

14 7. Moreover, after issuing the Report, I located an email list vendor selling the names and
15 email addresses of "Android Phone Owners/Users" (see Exhibit 4), which prices the
16 information at issue at \$185 per thousand, or \$0.185 per set, which is within the range of
17 comparable lists according to my Report.

18 8. Consequently, the proxy data referenced in the Report as support for my conclusion,
19 while referencing names and postal mailing addresses, remains valid as an indicator of a base
20 level, or benchmark, market price of name and email information substantially comparable to,
21 and representative of, the information at issue. If anything, it errs slightly on the side of caution
22 by not giving greater weight to the most expensive lists, and rounding down to the nearest cent
23 per set of name and email address.

24
25
26 ⁵ This is calculated as the simple average between the total costs of the email lists of \$330 and \$300 per thousand
27 for "mobile smartphone users" and "smartphone and tablet users" respectively. Note that in each of the Nextmark
28 documents attached hereto as exhibits, the reference to "M" indicates that the list offered for sale is priced on a
per-thousand record basis, such that a price of \$190/M is \$190 for one thousand records, or \$0.19 per individual
record.

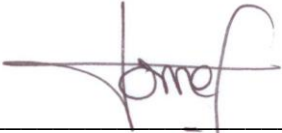
1 9. Therefore, I reiterate my conclusion that:

2 The personally identifiable information disclosed by GOOGLE allegedly
3 in breach of its contracts with Plaintiffs and other users is an economic
4 good with a baseline market value estimated at \$0.18 per set (name,
5 email, and location).

6
7 10. Nothing in the foregoing has any impact whatsoever on any other analyses or
8 conclusions reached in my Report, including the other valuations provided therein.

9 11. I declare under the penalty of perjury and under the laws of the State of California that
10 the forgoing is true and correct and based upon my personal knowledge and/or professional
11 opinions, and that if called upon to testify, I could verify the accuracy of the same.
12 Furthermore, compensation related to this report is not dependent, in any way, upon the
13 conclusions reached during the performance of the analysis.

14 This document was executed in the city of San Diego, California on June 12, 2015.

15
16
17 By: 

18 Fernando Torres, MSc
19 Chief Economist
20 IPmetrics LLC
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EXHIBITS

- (1) Smartphone Owner Email Lists – Results 1 – 30 of 12,344 (Nextmark.com).
- (2) Mobile Smartphone Users Mailing List – Pricing (Nextmark.com).
- (3) Mobile Smartphone and Tablet Users – Pricing (Nextmark.com).
- (4) Android Phone Owners/Users Mailing List – (Nextmark.com)

1 Start 2 Results 3 Data Card 4 Request 5 Finished



Exact Data
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smartphone owners email lists

Showing 1-30 of 12,344 smartphone owners email lists found.

RANK	TITLE	TYPE	LPI	SIZE	PRICE
1	Mobile Smartphone Users			10,254,586	\$190.00/M
2	AMERICAN BUSINESS NETWORK - FRANCHISE OWNERS		92	984,650	\$95.00/M
3	Farm Trends Berry Crops		80	6,324	\$130.00/M
38	Mobile Smartphone Users			10,254,586	\$190.00/M
25	Mobile Application Users and Downloaders Email Masterfile			9,478,155	\$150.00/M
22	Active MEDbase200 Nurse Specialists		95	6,997,732	\$29.50/M
19	Active Nurse Navigator (by Type, Setting, Specialty)			38,454	\$59.00/M
19	Hispanic Business OWNERS			1,500,000	\$75.00/M
18	Active NURSE SPECIALISTS (Nurses by Type, Setting, Specialty and Job Function)		98	6,992,355	\$59.00/M
18	Import Auto OWNERS USA - Multi-Sourced Import Car Owner Database		83	22,403,408	\$140.00/M
16	Value Wizard - Calling All Cars or Used Car OWNERS			18,000,000	\$175.00/M
15	AmeriList US Consumer Database		95	230,000,000	\$65.00/M
14	Airplane OWNERS , Airline Transport Pilots, Aircraft OWNERS , Commercial Pilots			318,498	\$300.00/M
14	AmeriList Auto Owner Enhanced Database		80	140,700,428	\$75.00/M
13	Automobile and Car OWNERS VIN		90	66,273,367	\$120.00/M
13	Credit Card OWNERS by Region			4,210,730	\$80.00/M
13	Exotic Automobile OWNERS Database			319,919	\$85.00/M
13	VACATION MARKETING - BOAT TRAILER OWNERS			6,000,000	\$70.00/M
12	Amsterdam Printing Small Business OWNERS Email Database		79	6,525	\$275.00/M
12	Christian Business OWNERS And Managers at Home Address			6,734,009	\$150.00/M
12	Christian Home Business OWNERS			6,436,274	\$150.00/M
12	Farm OWNERS , Operators, Owner/Operators			179,081	\$175.00/M
12	Grease Monkeys - Automotive OWNERS			24,584,625	\$175.00/M
12	Home Business OWNERS And Opportunity Seekers			6,573,682	\$150.00/M
12	Road Warriors - Auto OWNERS			98,008,948	\$110.00/M
12	Swimming Pool OWNERS : Direct Mail, Telemarketing, and E-mail Available		66	7,350,452	\$80.00/M
12	The Mobile Market - Smartphone and Tablet Users			51,741,687	\$175.00/M
11	Boat and Yacht OWNERS		88	1,230,314	\$80.00/M
11	Business OWNERS at Home		72	4,990,629	\$80.00/M
11	E-Connect - Responsive Pet OWNERS			10,000,000	\$85.00/M
11	Hispanic Business OWNERS		72	1,990,629	\$80.00/M
11	Home Business OWNERS		67	2,530,084	\$100.00/M
11	Pet OWNERS		69	3,042,857	\$80.00/M

1 2 3 4 5 NEXT END

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Phone Lists



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1 Start 2 Results 3 Data Card 4 Request 5 Finished


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Mobile Smartphone Users Mailing List

[Click here to fill out a form to receive a FREE quote on this list and 10% off your first order through ConsumerBase!](#) The Mobile Smartphone Users file provides its users with the best, in-depth consumer information for cell phone owners who have upgraded to phones with advanced technology. Our file is continuously updated for mobile smartphone users utilizing 4G, internet, apps, and other technologies. Over 97% deliverable, this list creates the opportunity for businesses to dramatically increase response rates for their campaigns targeting smartphone customers.

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SEGMENTS		COUNTS THROUGH 04/02/2015
10,254,586	TOTAL UNIVERSE / BASE RATE	\$190.00/M
10,254,586	POSTAL	+ \$190.00/M
935,218	EMAIL	+ \$140.00/M
875,259	PHONE	+ \$125.00/M

DESCRIPTION

This list's managers feature click response to online advertisement in 38 proprietary responder categories. Use this file for postal/email/telephone rental appends and expect a marked increase in responsiveness, or simply augment existing house files.


The list managers gather consumer data through response to email advertisements sent out by category. Reach responders who have clicked on a related advertisement in the past 30, 60, 90 or 365 days. Every record has at minimum full name, postal and email addresses, with NCOA performed monthly and all postal data DPV and CASS certified.

ConsumerBase proprietary responder categories include:

Apparel, Auctions, Auto Loans, Bankruptcy, Beauty, Business Opportunity Seekers, Business Opportunity Home Business, Cable and Internet Services, Collectibles and Gifts, Computing, Credit Cards, Dating Services, Debt Consolidation, Education, Electronics, Entertainment, Financial, Fitness, Gambling, Health, Home Business, Home Improvement, Insurance, Investments, Mortgages, Software, Sweepstakes, Tax Services, Telecom, Travel, Weight Loss, and Wireless

ORDERING INSTRUCTIONS

- To order this list, contact your List Broker and ask for NextMark List ID #340155 or [click here to place your request](#).
- 5,000 NAME MINIMUM ORDER \$0.00 MINIMUM PAYMENT
- NET NAME IS NOT ALLOWED
- EXCHANGE IS NOT AVAILABLE
- REUSE IS AVAILABLE

MARKET:	CONSUMER
CHANNELS:	
SOURCE:	INTERNET/ON-LINE, COMPILED LISTS
PRIVACY:	UNKNOWN
DMA?:	NO
STATUS:	PREFERRED PROVIDER
GEO:	USA


SELECTS


AGE	\$5.00/M
CHILDS AGE	\$10.00/M
DWELLING SIZE/TYPE	\$5.00/M
ETHNIC/ETHNICITY	\$15.00/M
GENDER/SEX	\$5.00/M
HOME OWNER	\$5.00/M
INCOME SELECT	\$5.00/M
INTEREST CATEGORIES	\$5.00/M
LENGTH OF RESIDENCE	\$5.00/M
LIFESTYLE	\$15.00/M
MARITAL STATUS	\$5.00/M
OCCUPATION	\$5.00/M
PERSONALIZATION	\$100.00/M
POSTAL CODE	\$15.00/M
RECENCY	\$5.00/M
REVERSE EMAIL APPEND	\$350.00/M
SCF	
STATE	
ZIP	


ADDRESSING

KEY CODING	\$5.00/M
A/B SPILT	\$50.00/F
BUSINESS ADDRESS	NO CHARGE
CARRIER ROUTE	NO CHARGE
CD ROM	\$50.00/F
EMAIL	\$25.00/F
NTH NAME	NO CHARGE
RUN CHARGE	\$10.00/M
RUSH FEE	\$100.00/F
ZIP + 4	NO CHARGE

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The Mobile Market - Smartphone and Tablet Users Mailing List

[Click here to fill out a form to receive a FREE quote on this list and 10% off your first order through ConsumerBase!](#) The Mobile Market - Smartphone and Tablet Users mailing list contains in-depth consumer data for tech-savvy consumers owning smartphones, tablet PCs, and other mobile devices. These files are regularly updated through National Change of Address verification every 30 days (3x more often than our competitors) and contain valuable consumer data for individuals always buying the latest tech gadget, regardless of the cost. This mailing list allows marketers to increase the return on their advertising dollars by focusing their campaign on a very specific audience - mobile consumers.

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SEGMENTS		COUNTS THROUGH 05/08/2015
51,741,687	TOTAL UNIVERSE / BASE RATE	\$175.00/M
51,741,687	POSTAL	+ \$175.00/M
4,718,842	EMAIL	+ \$125.00/M
3,280,423	PHONE	+ \$110.00/M

DESCRIPTION

This list's managers feature click response to online advertisement in 38 proprietary responder categories. Use this file for postal/email/telephone rental appends and expect a marked increase in responsiveness, or simply augment existing house files.

The list managers gather consumer data through response to email advertisements sent out by category. Reach responders who have clicked on a related advertisement in the past 30, 60, 90 or 365 days. Every record has at minimum full name, postal and email addresses, with NCOA performed monthly and all postal data DPV and CASS certified.


ConsumerBase proprietary responder categories include:

Apparel,

Auctions, Auto Loans, Bankruptcy, Beauty, Business Opportunity Seekers, Business Opportunity Home Business, Cable and Internet Services, Collectibles and Gifts, Computing, Credit Cards, Dating Services, Debt Consolidation, Education, Electronics, Entertainment, Financial, Fitness, Gambling, Health, Home Business, Home Improvement, Insurance, Investments, Mortgages, Software, Sweepstakes, Tax Services, Telecom, Travel, Weight Loss, and Wireless

ORDERING INSTRUCTIONS

- To order this list, contact your List Broker and ask for NextMark List ID #345298 or [click here to place your request](#).
- 5,000 NAME MINIMUM ORDER \$0.00 MINIMUM PAYMENT

MARKET:	CONSUMER
CHANNELS:	
SOURCE:	INTERNET/ON-LINE, COMPILED LISTS
PRIVACY:	CONFIRMED OPT-IN
DMA?:	NO
STATUS:	PREFERRED PROVIDER
GEO:	USA

SELECTS

AGE	\$5.00/M
CHILDS AGE	\$10.00/M
DWELLING SIZE/TYPE	\$5.00/M
ETHNIC/ETHNICITY	\$15.00/M
GENDER/SEX	\$5.00/M
HOME OWNER	\$5.00/M
INCOME SELECT	\$5.00/M
INTEREST CATEGORIES	\$5.00/M
LENGTH OF RESIDENCE	\$5.00/M
LIFESTYLE	\$15.00/M
MARITAL STATUS	\$5.00/M
OCCUPATION	\$5.00/M
PERSONALIZATION	\$100.00/M
POSTAL CODE	\$15.00/M
REGENCY	\$5.00/M
REVERSE EMAIL APPEND	\$350.00/M
SCF	
STATE	
ZIP	

ADDRESSING

KEY CODING	\$5.00/M
A/B SPILT	\$50.00/F
BUSINESS ADDRESS	NO CHARGE
CARRIER ROUTE	NO CHARGE
CD ROM	\$50.00/F
EMAIL	\$25.00/F
NTH NAME	NO CHARGE
RUN CHARGE	\$10.00/M
RUSH FEE	\$100.00/F
ZIP + 4	NO CHARGE

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- EXCHANGE IS NOT AVAILABLE
- REUSE IS AVAILABLE
- CANCELLATION FEE AT \$250.00/F

- SMARTPHONE AND POCKET PC MAGAZINE
- PC MAGAZINE SUBS ZIFF DAVIS MEDIA
- FRONTGATE
- MAXIMUM PC
- DIGITALLY CONNECTED TABLET OWNERS
- COMPUTER TABLET OWNERS - POSTAL & EMAIL MAILING LIST
- APPLE PRODUCT OWNERS - POSTAL & EMAIL MAILING LIST
- SOCIAL MEDIA TOUT USERS - POSTAL & EMAIL MAILING LIST
- HAMMACHER SCHLEMMER MAIL ORDER BUYERS

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1 Start 2 Results 3 Data Card 4 Request 5 Finished



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Android Phone Owners/Users Mailing List

Overview: The Android file consists of smartphone owners that have indicated that they own an Android powered device specifically. Manufacturers consist of HTC, Samsung, LG and others. These are very internet & technology savvy users that use their phones to check email, text message, surf the web, play games and plan their schedules. Most of these users have their entire lives on their phones, and are best reached via email or SMS.

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SEGMENTS		COUNTS THROUGH 04/13/2015	
2,761,116 TOTAL UNIVERSE / BASE RATE		\$185.00/M	
DESCRIPTION			
<p>The Android file consists of smartphone owners that have indicated hat they own an Android powered device specifically. Manufacturers consist of HTC, Samsung , LG and others. These are very internet & technology savvy users that use their phones to check email, text message, surf the web, play games and plan their schedules Most of these users have their entire lives on their phones, and are best reached via email or SMS.</p>			
ORDERING INSTRUCTIONS			
<ul style="list-style-type: none">To order this list, contact your List Broker and ask for NextMark List ID #376817 or click here to place your request.15,000 NAME MINIMUM ORDER \$650.00 MINIMUM PAYMENTPLEASE INQUIRE ABOUT NET NAMEPLEASE INQUIRE ABOUT EXCHANGEPLEASE INQUIRE ABOUT REUSECANCELLATION FEE AT \$500.00/F			
MARKET:		BUSINESS AND CONSUMER	
CHANNELS:		  	
SOURCE:		COMPILED LISTS, BUYERS, CASH BUYERS, MULTI-BUYERS, SINGLE BUYERS, LIFESTYLE QUESTIONNAIRE, DIRECTORIES, INTERNET/ON-LINE, DIRECT RESPONSE, OPT-IN E-MAIL, MASTERFILE ENHANCED	
PRIVACY:		UNKNOWN	
DMA?:		NO	
STATUS:		STANDARD PROVIDER	
GEO:		USA	
GENDER:		41% FEMALE 59% MALE	
SELECTS			
AGE			
CHILDREN			
EDUCATION			
GENDER			
INCOME RANGE			
MARITAL STATUS			
OCCUPATION			
SCF			
ZIP			
ADDRESSING			
KEY CODING		PLEASE INQUIRE	
RELATED LISTS			
CELL PHONE LEASE & CONTRACT EXPIRES - POSTAL & EMAIL MAILING LIST			
SMARTPHONE GIZMO - THE NATIONAL SOURCE FOR CELL PHONE CARRIERS			
AUTO BASE @ ARM: SUV/MINIVAN OWNERS WITH CHILDREN			
EPSILON TARGETSOURCE U.S. - WIRELESS PHONE			
EARLY MOMENTS BOOK CLUB MASTERFILE			
DIGITALLY CONNECTED TABLET OWNERS			
AMERICAN TECH SAVVY ENTHUSIASTS			
CATHOLIC DONORS			
AMERICAN SMARTPHONE AND CELL PHONE OWNERS			

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